

amended claims  
published claims  
following

Claims

1. Magnetic particles with an outer surface made of glass that contains boroxide.
2. Particles according to claim 1, characterized in that the glass surface is substantially pore-free or has pores with a diameter of less than 10 nm.
3. Particles according to claim 1 or 2, characterized in that they have a particle size of between 10 and 60  $\mu\text{m}$ .
4. Particles according to claim 1 or 2, characterized in that any pores contained in the surface have a diameter of less than 1 nm.
5. Particles according to claim 1 or 2, characterized in that the particles contain a composite material with a mica core and magnetite particles immobilized on it, the composite material being embedded in a glass layer.
6. Procedure for isolating a biological material comprising
  - Bringing a sample that contains the biological material in a fluid in contact with particles according to one of the claims 1 through 15 under conditions in which the biological material binds directly to the glass surface, and
  - Separating the biological material from the fluid.
7. Procedure according to claim 6, characterized in that the biological material is a nucleic acid.
8. Procedure according to claim 6 or 7, characterized in that the magnetic particles are not premagnetized when brought in contact with the sample.
9. Procedure for isolating nucleic acids comprising

- Bringing a sample that contains the nucleic acids in native form in a fluid in contact with magnetic particles having glass surfaces that are substantially pore-free or that have pores with a diameter of less than 10 nm under conditions in which the nucleic acids in their native form can bind directly to the glass surface, and
- Separating the bound nucleic acids from the fluid.

10. Procedure based on claim 9, characterized in that the magnetic particles are not premagnetized when brought in contact with the sample.

11. Procedure for manufacturing magnetic glass particles with a particle size of between 10 and 60  $\mu\text{m}$  by

- Providing a magnetic core and
- Enclosing the magnetic core in a substantially pore-free glass surface by
- Depositing a sol formed of an alcohol solution containing alkoxides of network-forming components on the surface,
- Transforming the sol layer into a gel layer by means of a spray drying procedure, and then
- Densifying the gel.

12. Application of ferromagnetic particles having an outer glass surface that is substantially pore-free or has pores with a diameter of less than 10 nm for isolating nucleic acids in native form.

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